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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/537,541	11/30/2005	Detlev Wittmer	BABE3003/FJD	4764
23364	7590	05/19/2006	EXAMINER	
BACON & THOMAS, PLLC 625 SLATERS LANE FOURTH FLOOR ALEXANDRIA, VA 22314			NATALINI, JEFF WILLIAM	
			ART UNIT	PAPER NUMBER
			2858	

DATE MAILED: 05/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/537,541

Applicant(s)

WITTMER ET AL.

Examiner

Jeff Natalini

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2858

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 10-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 June 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the output and input of the sensor plug includes an inductive interface (claim 15) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

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2. Claims 10-17 objected to because of the following informalities:

Each of the claims 10-17, begins with "A sensor plug head", then specifically claims 11 and 14-17, the claims state "A sensor plug head: wherein...." then will follow with a limitation about the sensor, but the claim is introduced to further limit the sensor plug head. To properly claim the invention as a whole it would be better to state for example: "An apparatus comprising: a sensor; a liquid container; and a sensor plug head.", then each of the following claims will be: "The apparatus of claim 1, wherein the sensor is a ...". Another example is what has been claimed in claim 18, where a sensor arrangement is claimed, and multiple elements of the arrangement are introduced.

Claims 16 and 17, lack antecedent basis for "said potentiometric sensor", these claims should both depend from claim 11 where this sensor is introduced and will be examined accordingly.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 10-14, 16, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Tauber et al. (5980712).

In regard to claims 10 and 18, Tauber et al. discloses a sensor plug head (fig 1-2) for connection to a sensor (fig 1-1; abstract), the sensor having at least one output for issuing a measurement signal (col 1 line 14-17), and a liquid container fillable with a reference or calibration liquid (abstract), said sensor plug head including: at least one input for receiving a potential-dependent signal (col 2 line 61-65, figure 1-plug in unit-2 has input from probe-1 and output to the wire leaving the plug); and a supply connection element for connecting to the liquid container (col 2 line 66-col 3 line 4).

In regard to claim 11, Tauber et al. discloses wherein the sensor is a potentiometric sensor with an output for issuing a potential-dependent signal (col 1 line 14-20); and the liquid container is a reference container (col 2 line 66- col 3 line 16).

In regard to claims 12 and 13, Tauber et al. discloses wherein said supply connection includes a first connection element of an electrolyte line and the sensor includes a second connection element that is an opening, where the first connection element is complementary to said second connection element and said electrolyte line is connectable to said opening for supplying the reference container with electrolyte (col 2 line 66 – col 3 line 23 also see col 3 line 49-64).

In regard to claim 14, Tauber et al. discloses wherein said at least one output and said at least one input include galvanic contacts (col 3 line 52-55).

In regard to claim 16, Tauber et al. discloses wherein the potentiometric sensor is a PH sensor or a redox sensor (col 1 line 16-17).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tauber et al. (5980712) in view of Bielawski et al. (6551478).

Tauber et al. lacks specifically disclosing wherein the output and input of the sensor plug includes an inductive interface.

Bielawski et al. discloses wherein the plug acts as an electrolyte for the probe and provides for ion transport across (col 3 line 66-col 4 line 5), thus providing a data exchange and is therefore equivalent to an inductive interface.

It would have been obvious to one with ordinary skill in the art at the time the invention was made for Tauber to include wherein the sensor plugs input/output provide an inductive interface as taught by Bielawski et al. in order to provide the use of the sensor in high temperature environments (abstract).

7. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tauber et al. (5980712) in view of Hiramoto et al. (4444644).

Tauber et al. lacks specifically wherein said potentiometric sensor includes an ion-sensitive field effect transistor.

Hiramoto et al. discloses a potentiometric sensor that includes an ion-sensitive field effect transistor (col 2 line 54-58).

It would have been obvious to one with ordinary skill in the art at the time the invention was made for Tauber et al. to include an ion sensitive field effect transistor in the potentiometric sensor as taught by Hiramoto et al. in order to determine a potential difference of a PH value of an electrolyte solution (col 2 line 56-58).

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lenferink et al. (6423197) discloses a sensor for a liquid that discloses a plug. Graser et al. (5820739) discloses an electrical plug connector for a measuring instrument.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Natalini whose telephone number is 571-272-2266. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diane Lee can be reached on 571-272-2399. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jeff Natalini



ANJAN DEB  
PRIMARY EXAMINER